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GODFREY, KEITH JOSEPH	
ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/731,067	HEJNA ET AL.	
	Examiner	Art Unit	
	Keith J. Godfrey	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 July 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-90* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-90* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. **Claims 1-20, 25-26, 28-30, 34-40, 48-68, 90** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hageman (US Patent 5231814), in view of Wentworth (US Patent 4364984).

9. **As to claims 1 and 34** Hageman ('814) teaches an oriented strand board (OSB) laminated by adhesives to an aluminum reflective layer (radiant barrier material) with perforations and curing the adhesive with a roller press (abstract and Fig. 2). Hageman ('814) does not teach the curing of the resins in a single step. Wentworth ('984) teaches multilayer wood stand board with a plurality of resins cured in a single step (abstract and column 8, lines 22-43). Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to cure all resins in the composite in a single curing step, as taught in Wentworth ('984), in the process of Hageman ('814) because of known benefits of on-line manufacturing such as more efficient processing and lower energy cost for production. Because both references are concerned with a

similar technical field, namely that of wood composite manufacturing, one would have a reasonable expectation of success from the combination.

10. **As to claims 2-8,** it is submitted that if all prior limitations are met in the prior process claim, the properties of emissivity and permeability would be intrinsic in the product produced.

11. **As to claims 9-11 and 15-18,** Hageman ('814) teaches that each perforation is about 0.06 mm or less in diameter and appear in a range of 50-160 perforations/apertures per square inch (column 3, lines 17-19). Hageman ('814) also teaches that the provision of a plurality of perforations is particularly important because it eliminates problems associated with trapped moisture in structural materials made of wood, which can lead to degradation or decay—perforations permit the barrier layer to "breathe" (column 2, lines 42-49). It is noted that both the size of the perforation and the density in which they occur directly effect permeability and emissivity and as such are result-effective variables. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use routine experimentation to determine an optimum perforation diameter and perforation surface density in the process of Hageman ('814) because Hageman ('814) specifically teaches that the diameter of the perforation and the perforation surface density are result-effective variables.

12. **As to claim 12,** by applicant's own disclosure it is noted that perforations are know in the art to be synonymous with apertures (specification, page 18, lines 5-7).

13. **As to claim 13,** Hageman ('814) teaches an unperforated material which creates a barrier to moisture (column 2, lines 66-68 and column 3, lines 1-4).

14. **As to claim 14,** Hageman ('814) teaches unplugged apertures (column 3, lines 7-9).

15. **As to claim 19,** Hageman ('814) teaches the metallic foil and kraft paper (radiant barrier material) adhered to one outer surface of the OSB (wood-based composite panel) (abstract).

16. **As to claim 20,** Hageman ('814) does not teach the use of two radiant barrier materials on either side of the wood board composite. Although Hageman ('814) does not disclose a plurality of radiant barriers, the mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

17. **As to claim 25 and 30,** Hageman ('814) teaches a radiant barrier material including metallic foil and kraft paper (backing material) (abstract).

18. **As to claim 26,** Hageman ('814) teaches an aluminum foil (column 2, lines 33-35).

19. **As to claims 28-29,** Hageman ('814) teaches that provisions of the metallic foil reflect heat back in the direction from which it comes (column 2, lines 56-60). Thus it is submitted that the metallic foil has two oppositely facing surfaces, one of which faces inward and one of which faces outward, both of which have enough luster to effectively reflect heat.

20. **As to claims 35-37,** it is submitted that if all prior limitations are met in the prior process claims, the properties of fire retardant, moisture resistant, and fungal resistant would be intrinsic in the product produced.

21. **As to claim 38-40,** Hageman ('814) does not teach a phenol-melamine-formaldehyde first resin. Wentworth ('984) teaches that formaldehyde, phenol, and melamine resin based adhesives or combinations of them can be used to form the admixtures (first resin) (column 10, lines 45-56). Wentworth ('984) also teaches that the type of adhesive selected usually is determined by the intended use of the end product, the properties desired for the end product, and the process selected to form the multilayer particleboard (column 10, lines 45-56). Hence it is submitted that the admixture polymer (first resin) is a result-effective variable. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to use routine experimentation to determine an optimum combination of phenol, formaldehyde, and melamine resins for the admixture (first resin) in the process of Hageman ('814) in view of Wentworth ('984) because Wentworth ('984) specifically teaches the admixture (first resin) depends on the product final use and method of making, and as such teaching that the admixture (first resin) is a result-effective variable.

22. **As to claims 48-54,** Hageman ('814) does not teach a size profile for the stands of wood used in the OSB. However Wentworth ('984) teaches that superior strength, durability and stability properties are achieved by having wood particles in the form of short elongated particles, pellet shaped particles and/or long, thin wood fiber particles

(column 6, lines 1-3 and 20-23). Hence that size and shape of wood flake has a definite structural effect, and as such the wood flake dimensions are a result-effective variable. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) . Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use routine experimentation to determine an optimum dimension of the wood flakes in the process of Hageman ('814) in view of Wentworth ('984) because Wentworth ('984) specifically teaches that the dimensions of the wood flakes have certain structural properties associated with them, and as such teaches that the wood flake dimensions are a result-effective variable.

23. **As to claims 55-68,** it is known in the art that when an oriented strand board is manufactured, a resin is placed over a plurality of flakes of wood effectively impregnating the flakes of wood. The degree of substantiality of impregnation will invariably be different in different areas of a single composite. Because the flakes in and of themselves are not identical, an even distribution of the resin will vary and subsequently an impregnation constant cannot be maintained. Therefore it is submitted that during the application of resin when manufacturing oriented strand board, a single composite will result in areas having substantial impregnation, partial impregnation and complete impregnation.

24. **As to claim 90,** it is noted that the last paragraph of claim 90 recites limitations that pertain to a product and not a method. Therefore it is submitted that the properties disclosed in the last paragraph for the product would be intrinsic with the application of the method above.

25. **Claim 27** rejected under 35 U.S.C. 103(a) as being unpatentable over Hageman (US Patent 5231814), in view of Wentworth (US Patent 4364984) as described above for claims 1-20, 25-26, 28-30, 34-40, 48-68, 90 in further view of Naipawer, III et al. US 2002/0037405 A1.

Hageman ('814) in view of Wentworth ('984) teach the basic claimed process as described above.

26. **As to claim 27**, the modified disclosure of Hageman ('814) further does not teach the thickness of the aluminum foil layer. Naipawer, III et al. US 2002/0037405 A1 teaches an aluminum foil thickness of 0.5 to 3 mils (0.0005 inches to 0.003 inches) (paragraph 15). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an aluminum foil thickness of 0.0001 inches (1 mil), as taught in Naipawer, III et al. US 2002/0037405 A1, in the process of Hageman ('814) in view of Wentworth ('984) because Naipawer, III et al. US 2002/0037405 A1 teaches that the aluminum foil, with a thickness of 0.5 to 3 mils provides a surface with high reflective properties against sun rays (paragraph 15). Because both references are concerned with a similar technical field, namely that of composite materials utilizing an aluminum foil layer within, one would have a reasonable expectation of success from the combination.

27. **Claim 31** rejected under 35 U.S.C. 103(a) as being unpatentable over Hageman (US Patent 5231814), in view of Wentworth (US Patent 4364984) as described above

for claims 1-20, 25-26, 28-30, 34-40, 48-68, 90 in further view of Adelman US Patent 4263360.

Hageman ('814) in view of Wentworth ('984) teach the basic claimed process as described above.

28. **As to claim 31,** the modified disclosure of Hageman ('814) further does not teach the liner board having a weight of at least 25 lbs per thousand square feet. Adelman ('360) teaches a layer of 50 lbs kraft paper (column 1, lines 63-68). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the 50 lbs kraft paper, as taught in Adelman ('360), as the liner board backing material in the process of Hageman ('814) in view of Wentworth ('984) because kraft paper permits moisture to pass through avoiding problems associated with fungal growth and wood degradation. Because both references are concerned with a similar technical field, namely that of composites incorporating a permeable kraft paper layer, one would have a reasonable expectation of success from the combination.

29. **Claims 21-24 and 32-33** rejected under 35 U.S.C. 103(a) as being unpatentable over Hageman (US Patent 5231814), in view of Wentworth (US Patent 4364984) as described above for claims 1-20, 25-26, 28-30, 34-40, 48-68, 90 in further view of Fahmy et al. (US Patent 6286280).

Hageman ('814) in view of Wentworth ('984) teach the basic claimed process as described above.

30. **As to claims 21-24,** the modified disclosure of Hageman ('814) further does not teach the use of polyethylene resin as an adhesive. Fahmy ('280) teaches a paper-board composite (wood-board composite) adhered to a metal foil layer using polyethylene (abstract and column 2, lines 51-60). Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to provide polyethylene as the adhesive, as taught by Fahmy ('280), to the radiant barrier wood-board composite manufacturing process of Hageman ('814) in view of Wentworth ('984) because of known adhesive qualities of polyethylene when cured. Because both references are concerned with a similar technical field, namely that of wood-based composites using a foil layer, one would have a reasonable expectation of success from the combination.

31. **As to claim 32,** the modified disclosure of Hageman ('814) further does not teach the metallic foil and backing material adhered by a third resin. Fahmy ('280) teaches a first resin adhering the wood-based panel to the paperboard (column 3, lines 64-67 and column 4, lines 1-3), a second resin between the plurality of layers of paperboard (backing material) (column 2, lines 3-12), and a polyolefin third resin adhering the paperboard (backing material) and the metallic foil (column 2, lines 1-12). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a third resin to adhere the paperboard (backing material) to the metallic foil, as taught in Fahmy ('280), in the process Hageman ('814) in view of Wentworth ('984) because known adhesive qualities polyolefin resins have when used as an adhesive between two surfaces. Because both references are concerned with a

similar technical field, namely that of wood-based composites using a foil layer, one would have a reasonable expectation of success from the combination.

32. **As to claim 33,** Hageman ('814) teaches polyvinyl acetate as a resin adhesive (column 4, lines 25-28). Hageman ('814) does not teach using polyvinyl acetate as the third resin adhesive between the backing material and the metallic foil. It is also noted that Hageman ('814) is silent to the adhesive used between the kraft paper (backing material) and the foil. It is further noted that although an adhesive is not mentioned, an adhesive is present in order for the kraft paper and foil to be commonly adhered to the wood-board composite. Fahmy ('280) teaches a polyolefin third resin adhesive to adhere the paperboard (backing material) and the metallic foil (column 2, lines 1-12). Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the polyvinyl acetate polymer adhesive, as taught in Hageman ('814), as the third resin to adhere the backing material to the metallic foil, as taught in Fahmy ('280), in the process of Hageman ('814) in view of Wentworth ('984) which uses polyvinyl acetate as the adhesive resin. Because both references are concerned with a similar technical field, namely that of wood-based composites using a foil layer, one would have a reasonable expectation of success from the combination.

33. **Claims 72-74 and 79-80** rejected under 35 U.S.C. 103(a) as being unpatentable over Hageman (US Patent 5231814), in view of Wentworth (US Patent 4364984) as described above for claims 1-20, 25-26, 28-30, 34-40, 48-68, 90 in further view of Narukawa et al. (US Patent 4148781).

34. Hageman ('814) in view of Wentworth ('984) teach the basic claimed process as described above.

35. **As to claims 72-74 and 79-80,** Hageman ('814) in view of Wentworth ('984) does not teach an elevated temperature or a sufficient period of time for curing the first and second resins. Narukawa ('781) teaches a heat-treatment temperature at 50° to 200° C for 3 to 30 minutes (column 6, lines 7-10). It is submitted that It is well known in the art that different binders (adhesives) do not all cure at the same temperature and exposure time. Each binder (adhesive) has a specific temperature and time length to cure. Hence it is submitted that the temperature and time period of exposure are result-effective variables. *In re Boesch,* 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use routine experimentation to determine an optimum temperature and time to cure the resin binders (adhesives) in the process of Hageman ('814) in view of Wentworth ('984) because it is well know to use different temperatures and exposure times with different resin binders (adhesives), and as such teaching that cure temperature and exposure time are result-effective variables.

36. **Claims 41-47** rejected under 35 U.S.C. 103(a) as being unpatentable over Hageman (US Patent 5231814), in view of Wentworth (US Patent 4364984) as described above for claims 1-20, 25-26, 28-30, 34-40, 48-68, 90 in further view of Speaks et al. US Patent 5665798.

Hageman ('814) in view of Wentworth ('984) teach the basic claimed process as described above.

37. **As to claim 41-47,** Hageman ('814) in view of Wentworth ('984) does not teach the specific species of wood the OSB wood flakes belong. Speaks ('798) teaches a wood composite product, such as an OSB, made from pine, oak, and maple (column 1, lines 10-13 and claim 11). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use wood particles from pine, oak, and maple, as taught in Speaks ('798), in the process of Hageman ('814) in view of Wentworth ('984) because of known structural properties of pine, oak, and maple. Because both references are concerned with a similar technical field, namely that of wood board composites including OSB, one would have a reasonable expectation of success from the combination.

38. **Claims 75-78** rejected under 35 U.S.C. 103(a) as being unpatentable over Hageman (US Patent 5231814), in view of Wentworth (US Patent 4364984) as described above for claims 1-20, 25-26, 28-30, 34-40, 48-68, 90 in further view of Ueda et al. (US Patent 5064592).

39. Hageman ('814) in view of Wentworth ('984) teach the basic claimed process as described above.

40. **As to claims 75-78,** Hageman ('814) in view of Wentworth ('984) does not teach an elevated pressure for curing the first and second resins. Ueda ('592) teaches that it is known to cure wood impregnated with a thermosetting resin by pressure (column 1,

lines 27-33). It is submitted that It is well known in the art that different resins do not all cure at the same elevated pressure. Each resin has a specific pressure needed to effectively cure. Hence it is submitted that the amount of pressure for curing the resin in the wood composite is a result-effective variable. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use routine experimentation to determine an optimum pressure to effectively cure the resins in the process of Hageman ('814) in view of Wentworth ('984) because it is well known to use different pressures to cure different resins, and as such teaching that cure pressure is a result-effective variable.

41. **Claims 69-71** rejected under 35 U.S.C. 103(a) as being unpatentable over Hageman (US Patent 5231814), in view of Wentworth (US Patent 4364984) as described above for claims 1-20, 25-26, 28-30, 34-40, 48-68, 90 in further view of Wilson et al. (US Patent 6251495).

42. Hageman ('814) in view of Wentworth ('984) teaches the basic claimed process as described above.

43. **As to claims 69 and 71,** Hageman ('814) in view of Wentworth ('984) does not teach the method of how the apertures are formed. Wilson ('495) teaches spike rolling the radiant barrier material after the material is placed on the substrate (wood-board composite) (column 3, lines 45-53 and See element 100 in Fig. 4 and Fig. 5). Hence the apertures are formed from the metallic foil side to the backing material side.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use spike rolling for the formation of the apertures in the radiant barrier material, as taught in Wilson ('495), with the wood-board composite manufacturing process of Hageman ('814) in view of Wentworth ('984) because apertures allow for a higher moisture permeability beneficial to the reduction of fungal growth. Because both references are concerned with a similar technical field, namely that of manufacturing composites with radiant barriers, one would have a reasonable expectation of success from the combination.

44. **As to claim 70,** it is submitted that selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to reverse the order in which the apertures are made to the radiant barrier material.

45. **Claims 81-89** rejected under 35 U.S.C. 103(a) as being unpatentable over Hageman (US Patent 5231814), in view of Wentworth (US Patent 4364984) as described above for claims 1-20, 25-26, 28-30, 34-40, 48-68, 90 in further view of Radcliffe et al (US Patent 6136408).

46. Hageman ('814) in view of Wentworth ('984) teach the basic claimed process as described above.

47. **As to claims 81-82,** Hageman ('814) in view of Wentworth ('984) does not teach the radiant energy used to cure the resins. Radcliffe ('408) teaches curing methods

using radiant energy (ultraviolet, electron beam, ect.) for coated surfaces of oriented stand board (column 5, lines 19-21). It is noted that Radcliffe ('408) teaches that is know to substitute energy in the form of a wave (ultraviolet light) and particle (electron beam) to effectively cure resins in engineered wood. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use UV light radiation or electron beam, as taught in Radcliffe ('408), with the wood-board composite manufacturing process of Hageman ('814) in view of Wentworth ('984) because of known benefits of UV radiation and electron beam energy such as higher control of curing rates. Because both references are concerned with a similar technical field, namely that of engineered wood composites, one would have a reasonable expectation of success from the combination. Commonly, ultraviolet, microwave, beta radiation, gamma radiation, infrared, and radio frequency are all wave-based radiations.

48. **As to claims 85-89,** it is submitted that microwave, beta radiation, gamma radiation, infrared, and radio frequency are art recognized equivalents known for the same purpose. Similarly, electron beam, neutron beam, and proton beam are all particle-based radiations. **As to claims 83-84,** it is submitted that neutron beam and proton beam are art recognized equivalents know for the same purpose.

Response to Arguments

Applicant's arguments filed 07/19/2007 have been fully considered but they are not persuasive.

Applicant contends the following:

I. Examiner does not present a reasonable expectation of success from the combination of Hageman (US 5231814), hereinafter "Hageman", in view of Wentworth (US 4364984), hereinafter "Wentworth".

II. The instant invention would be non-obvious to one of ordinary skill in the art for several reasons including:

-Any resin between the metallic foil/backing material or backing material/blanket or feinted flakes could seep over the edges of the blanket when compressed, thereby providing a possibly inoperable product;

-The apertures or holes could be uncontrollable clogged by the resin, thereby providing a possible inoperable product;

-The foil/backing material an/or resin could stick to the press, risking damage to expensive equipment and thereby providing a possible inoperable product;

-The resin between the backing and blanket could mix and form and vapor impermeable barrier, reducing or eliminating the board's ability to "breath", thereby providing a possible inoperable product;

-The press could tear the foil and/or backing material while pressing and also while removing the pressure from the press, thereby providing a possibly inoperable product;

-The choice of adhesives to bind the radiant barrier to the blanket was complicated by the fact that they had to cure under conditions suitable for manufacturing the blanket of substantially oriented flakes without importing negative

properties on the produced board (e.g., discoloration, bubbling, imperfections, etc.), thereby providing a possibly inoperable product.

As to contention I, Examiner maintains that because both references disclose substantial teachings of wood composite manufacturing, specifically resin impregnated wood composites, that a reasonable expectation of success from the combination is evident and proper.

As to contention II, the arguments of counsel cannot take the place of evidence in the record (MPEP 2145 I). Further it is noted that alleged complications provided by applicant do not render the combination non-obvious. Hageman and Wentworth are therefore properly combinable to read on the instant invention.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith J. Godfrey whose telephone number is 571-272-6391. The examiner can normally be reached on 8:00-5:00 Mon-Fir.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina A. Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

kjg

CHRISTINA JOHNSON
SUPERVISORY PATENT EXAMINER